

U. S. PLANT PATENT APPLICATION OF

YOSHIRO ARIMITSU

FOR: PORTULACA PLANT NAMED

‘BODHIGCRE’

ARIMITSU, Yoshira

TITLE: PORTULACA PLANT NAMED 'BODHIGCRE'

APPLICANT: YOSHIRO ARIMITSU

BOTANICAL CLASSIFICATION:

Portulaca grandiflora cultivar Bodhigcre

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BACKGROUND OF THE INVENTION

The present Invention relates to a new and distinct cultivar of Portulaca plant, botanically known as *Portulaca grandiflora*, and hereinafter referred to by the cultivar name Bodhigcre.

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The new Portulaca is a product of a planned breeding program conducted by the Inventor in Lompoc, California. The objective of the breeding program is to create new Portulacas with dense plant habit, numerous large flowers and attractive flower coloration.

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The new Portulaca originated from a self-pollination made by the Inventor of a proprietary Portulacaseedling selection identified as code number 2PR50-2, not patented. The new Portulaca was selected as a

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single plant from the resulting progeny of the self-pollination by the Inventor in a controlled environment in Lompoc, California.

Asexual reproduction of the new cultivar by vegetative cuttings taken in Lompoc, California since May, 2000 has shown that the unique
5 features of this new *Portulaca* are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

Plants of the cultivar *Bodhigcre* have not been observed under all possible environmental conditions. The phenotype may vary somewhat
10 with variations in environment such as temperature and light intensity without, however, any variance in genotype.

The following traits have been repeatedly observed and are determined to be the unique characteristics of 'Bodhigcre'. These characteristics in combination distinguish 'Bodhigcre' as a new and
15 distinct cultivar:

1. Upright, low spreading and mounded plant habit.
2. Freely branching habit; dense and bushy growth habit.

3. Continuous flowering habit.
4. Numerous large pale yellow-colored flowers with red purple-colored margins.

Compared to plants of the parent selection, plants of the new
5 Portulaca differ in flower color, have a denser growth habit and flower continuously.

Plants of the new Portulaca can be compared to plants of the seed-propagated cultivar Sundial Cream, not patented. In side-by-side comparisons conducted in Lompoc, California, plants of the new
10 Portulaca differed from plants of the cultivar Sundial Cream in the following characteristics:

1. Plants of the new Portulaca had a denser growth habit than plants of the cultivar Sundial Cream.
2. Plants of the new Portulaca flowered continuously whereas
15 plants of the cultivar Sundial Cream flowered intermittently.

3. Flowers of plants of the new Portulaca did not produce pollen whereas flowers of plants of the cultivar Sundial Cream produced pollen.

Plants of the new Portulaca can be compared to plants of the seed-
5 propagated cultivar Margarita Cream, not patented. In side-by-side
comparisons conducted in Lompoc, California, plants of the new
Portulaca differed from plants of the cultivar Margarita Cream in the
following characteristics:

1. Plants of the new Portulaca were more vigorous than plants
10 of the cultivar Margarita Cream.
2. Plants of the new Portulaca had larger flowers than plants of
the cultivar Margarita Cream.
3. Flowers of plants of the new Portulaca did not produce
pollen whereas flowers of plants of the cultivar Margarita
15 Cream produced pollen.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new cultivar, showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type.

5 Colors in the photographs may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new Portulaca. The photograph at the bottom of the sheet comprises a side perspective view of a typical flowering plant of 'Bodhigcre' grown in a container. The photograph at the top of the sheet
10 comprises a close-up view of typical flowers of 'Bodhigcre'.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observations and measurements describe plants grown in Lompoc, California, under commercial practice during the winter in a polycarbonate-covered
15 greenhouse with day temperatures about 21 to 24°C, night temperatures about 16 to 18°C and light levels about 5,000 to 9,000 foot-candles. Plants were grown with one rooted cutting per 15.25-cm container for about eleven

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weeks. In the following description, color references are made to the Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used.

BOTANICAL CLASSIFICATION:

5 *Portulaca grandiflora* cultivar Bodhigcre.

PARENTAGE:

Female parent: Proprietary *Portulaca* seedling selection identified as 2PR50-2, not patented.

Male parent: Proprietary *Portulaca* seedling selection identified as
10 2PR50-2, not patented.

PROPAGATION:

Type cutting: Vegetative cuttings.

Time to initiate roots: About 7 to 10 days at 24°C.

Time to develop roots: About two to three weeks at 24°C.

15 Root description: Fine, fibrous, whitish in color.

Rooting habit: Freely branching.

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PLANT DESCRIPTION:

Form: Annual flowering plant; upright, low spreading and mounded
plant habit. Moderately vigorous. Freely branching with about eight
primary lateral branches and numerous secondary laterals per plant;
5 dense and bushy growth habit.

Plant height: About 13 cm.

Plant diameter: About 26 cm.

Lateral branches:

Length: About 15 cm.

10 Diameter: About 3 mm.

Internode length: About 1 cm.

Texture: Pubescence at nodes; succulent.

Color: 146B.

Foliage description:

15 Arrangement: Alternate, simple.

Length: About 1.3 cm.

Width: About 2.5 mm.

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Shape: Lanceolate.

Apex: Acute.

Base: Attenuate.

Margin: Entire.

5 Texture, upper and lower surfaces: Smooth, glabrous;
succulent.

Venation pattern: Parallel.

Color:

Developing foliage, upper and lower surfaces: 144A.

10 Fully expanded foliage, upper and lower surfaces:
147A.

Venation, upper and lower surfaces: 147A.

Petiole length: About 1 mm.

Petiole diameter: About 1 mm.

15 Petiole color: 144B.

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FLOWER DESCRIPTION:

5 Flower type and habit: Large radial cup-shaped flowers; flowers face upward or outward; single, axillary. Flowers persistent. Freely flowering, typically nine to eleven open flowers and flower buds per plant at one time.

Natural flowering season: Spring until frost in the autumn; flowering continuous during the flowering period.

Flower longevity on the plant: About seven to ten days.

Fragrance: None detected.

10 Flower diameter: About 5 cm.

Flower depth (height): About 2.5 cm.

Flower buds:

Length: About 1.2 cm.

Diameter: About 6 mm.

15 Shape: Ovoid.

Color: 73B.

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Petals:

Arrangement/appearance: About 18 petals arranged in about three whorls; imbricate.

Length: About 2.5 cm.

5 Width: About 1.8 cm.

Shape: Cordate.

Apex: Emarginate.

Base: Attenuate.

Margin: Entire.

10 Texture, upper and lower surfaces: Smooth, satiny.

Color:

When opening, upper and lower surfaces: 11C.

Fully opened, upper and lower surfaces: 11D; towards the margins, 73A to 73B. Color towards the margins

15 becoming closer to 73C to 73D with development.

Sepals:

Arrangement/appearance: Two sepals, opposite.

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Length: About 7 mm.

Width: About 6 mm.

Shape: Elliptic.

Apex: Acute.

5 Base: Truncate.

Margin: Entire.

Texture, upper and lower surfaces: Smooth, glabrous.

Color, upper and lower surfaces: 144B.

Peduncles:

10 Length: About 1 mm.

Width: About 1 mm.

Strength: Strong.

Texture: Smooth, glabrous.

Color: 144C.

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Reproductive organs:

Stamens:

Quantity per flower/arrangement: About 30 fused in a ring surrounding the ovary.

5 Anther shape: Elongated oval.

Anther length: Less than 1 mm.

Anther color: 23A.

Pollen amount: None observed.

Pistils:

10 Quantity per flower: One.

Pistil length: About 1.4 cm.

Stigma shape: Eight-parted.

Stigma color: 50C.

Style length: About 5 mm.

15 Style color: 51B.

Ovary color: 145C.

Fruit/seed: Fruit and seed production has not been observed.

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DISEASE/PEST RESISTANCE:

Plants of the new *Portulaca* have not been noted to be resistant to pathogens and pests common to *Portulaca*.